

CONTROLLED RESONANT HALF-BRIDGE INVERTER
FOR POWER SUPPLIES AND ELECTRONIC BALLASTS

Abstract of the Disclosure

5 A circuit (10) comprises a driven half-bridge inverter (100), a resonant output circuit (300), and a control circuit (400,500). Inverter (100) includes an upper transistor (120), a lower transistor (130), and a driver circuit (200). Control circuit (400,500) monitors a signal (V_X) within resonant output circuit (300). In response to the signal (V_X) reaching a predetermined level, control
10 circuit (400,500) directs driver circuit (200) to render upper transistor (120) conductive and lower transistor (130) non-conductive for a predetermined first period. Upon completion of the first period, control circuit (400,500) directs driver circuit (200) to render upper transistor (120) non-conductive and lower transistor (130) conductive for a second period. The second period ends when
15 the signal (V_X) again reaches the predetermined level.